Washington State Department of Transportation

Hood Canal Bridge East-half Replacement and West-half Retrofit Project

Fourth Cycle Pontoon Float-out Facts

The Final Cycle

The fourth cycle pontoon float-out marks the end of new pontoon construction for the Hood Canal Bridge Project. Overall pontoon construction for the project began Feb. 17, 2006 and will conclude Aug. 1, 2008.

Pontoons U and W bring the total number of completed new east-half pontoons to 14. The pontoons were constructed at Concrete Technology Corporation (CTC) in Tacoma. They will be outfitted and assembled at Todd Pacific Shipyards in Seattle and then used to replace the bridge's east half in May-June 2009.

The conclusion of cycle four brings the overall Hood Canal Bridge Project to **80 percent** completion and is an excellent indication that work is on schedule to meet the May-June 2009 float-in date.

The Float-Out

- It will take approximately **45 minutes** to complete the float out.
- Water in the graving dock will be about **12 feet deep.**
- All **79 cells** in the two pontoons must be inspected before they are floated out of the graving dock. Kiewit-General and WSDOT inspectors will be checking each and every cell prior to float-out.
- Foss Tugboats will use **three tugs** and **two log broncs** to maneuver the pontoons out of the graving dock.
- The pontoons will travel **35 miles** to Seattle, Wash. where they will be assembled and outfitted with roadway.
- Once float-out is complete, Hood Canal Bridge Project operations at CTC will be wrapped up.

The Newest Pontoons

The fourth cycle pontoons are the largest constructed for the Hood Canal Bridge's new east half.

- Pontoons U and W possess a combined weight of nearly **23.9 million pounds.** That is heavier than the combined weight of Washington State Ferries Jumbo Class vessels M/V Spokane and M/V Walla Walla, and Super Class vessels M/V Hyak and M/V Yakima by approximately 100,000 pounds.
- With pontoons U and W complete, more than **29,000 cubic yards** of concrete have been placed since pontoon construction began in 2006. That's enough material to build a standard 6-foot-wide by 4-inches-thick sidewalk approximately **74 miles** – roughly from Port Angeles to Bremerton.

	Pontoon U	Pontoon W
Height	18 feet	18 feet
Width	60 feet	60 feet
Length	360 feet	325 feet

East-half Replacement and West-half Retrofit Project

Project Facts
The new east-half of the Hood Canal Bridge is comprised of 17 pontoons. Fourteen pontoons have been built at the CTC graving dock. Three pontoons from the 1980s were retrofitted and reused.

Start Date: August 2002
Completion Date: 2010
Project Budget: $471 million

Major Work Items:
The east half of the Hood Canal Bridge is at the end of its useful life and in need of replacement. The project will make the bridge wider, safer and more reliable by…

- replacing the east-half floating portion of the bridge (May-June 2009)
- replacing the east and west approach spans (complete)
- replacing the east and west transition spans (May-June 2009)
- widening the west-half to create continuous 8-foot shoulders across the entire length of the bridge – matching the new east-half (complete)
- upgrading electrical systems on the west-half (2010)

Bridge History and Information:
The Hood Canal Bridge had quite a colorful past since it opened, and provides a vital economic and social link between the Olympic and Kitsap peninsulas.

- Construction began January 1958 and was opened to traffic on Aug. 12, 1961.
- Original bridge construction cost $26.6 million.
- The bridge was named in honor of William A. Bugge, director of the Department of Highways from 1949 to 1963. Bugge was a leader in the planning and construction of the bridge.
- The pontoons for the original floating bridge were constructed at a graving dock along the Duwamish River in Seattle and towed by tugs to the bridge site.
- The bridge's west half failed and sank on Feb. 13, 1979 during a storm carrying hurricane wind gusts of 120 mph and sustained winds of 85 mph. The west half re-opened in October 1982.
- Replacement of the west half and rehabilitation of the east half cost $143 million.
- At 7,869 feet (just shy of 1.5 miles), the Hood Canal Bridge is the longest floating bridge over saltwater in the world.
- Average daily traffic across Hood Canal Bridge is approximately 14,000 vehicles. Peak volumes reach 20,000 vehicles on summer weekends.
- The water depth below the floating bridge pontoons ranges from 80 to 340 feet. In its marine environment, the bridge is exposed to tide swings of 16.5 feet.
- During inclement weather, when winds of 40 mph or more are sustained for 15 minutes, the east and west draw spans are retracted (closing the bridge to vehicle traffic).

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